APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,121	10/31/2003	Michel Diane Cyriel Van Ackere	Q78135	8457

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EXAMINER
NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
2141	

NOTIFICATION DATE	DELIVERY MODE
07/31/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@sughrue.com
kghyndman@sughrue.com
USPatDocketing@sughrue.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _07 July 2008_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1,3-12,14 and 15_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1,3-12,14 and 15_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____ .
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

Detailed Action

1.   This Office Action is responsive to the Request for Continued Examination (RCE) filed 07/07/2008. Claims 1, 9-11 and 14 have been amended. Claims 2 and 13 have been canceled. Claims 1, 3-12 and 14-15 are presented for examination.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/07/2008 has been entered.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 1, 3-5, 7-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shen (US 2004/0013120 A1), in view of Killian (US 6,064,671).**

5.   As to claim 1, **Shen** teaches a method of relaying traffic from a source to a targeted destination in a communications network, said method comprising the steps of:

providing a first and at least one second network adapter each providing access to a network having a plurality of destinations *(providing egress ports 151 A-C of Fig. 1 and/or interfaces I/F 1, 4, 5 and 7 of Fig. 4)* **(Shen, Figs. 1 and 4-5)**,

providing a first routing table which defines at least a first destination associated with the first network adapter *(providing a first routing table 405 for VR-A which defines external destination ED1 associated with interface I/F1)* **(Shen, Fig. 4)**, and

relaying said traffic from the source to the targeted destination using one of the network adapters *(the destination of the packet 201 is looked up in the forwarding table to determine the appropriate outgoing interface)* **(Shen, paragraphs [0027-0028])**,

said method comprising the further step of providing at least one second routing table defining a second destination, wherein the second destination is individually associated with said at least one second network adapter *(providing a second routing table 407A for VR-B defining external destination ED2 associated with interface I/F4 as illustrated in Fig. 4)*, and wherein the step of relaying includes a step of selecting one of the first and second routing tables *(depending on the destinations of the packet such as ED1, ED2, or ED7, the packet is relayed to the appropriate routing tables such as*

routing table 405 for VR-A, routing table 407A for VR-B and routing table 407B for VR-C as illustrated in Fig. 4) **(Shen, paragraphs [0027-0029] and [0047])**.

Shen does not explicitly teach wherein the first and second routing tables define said first and second destinations as default destinations which are used for traffic relay in any default situation.

In the same field of endeavor, **Killian** teaches all routing tables should include a default entry, wherein a default routing table entry is one to be associated with any messages whose destination addresses do not match the destination address or address range of any of the other routing table entries **(Killian, page 7, lines 12-35)**.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the features of defining first and second destinations as default destinations which are used for traffic relay in any default situation for the first and second routing tables, as disclosed by **Killian**, into the teachings of **Shen**, since both references are directed to relaying network traffic using routing tables. One would be motivated to do so to allow messages, whose destination addresses do not correspond to any specific address or address range contained in the destination column of the routing table, to be relayed to the default destination, i.e., the next hop, through which the message should be routed to get to its destination **(Killian, page 7, lines 36-43)**.

6.   As to claim 3, **Shen-Killian** teaches the method of claim 1, wherein at least some of the first and second routing tables comprise specific destinations pointing to another routing table, preferably by means of a next hop entry **(Shen, paragraph [0029])**.

7.   As to claim 4, **Shen-Killian** teaches the method of claim 1, wherein the step of providing network adapters includes providing real network adapters and providing at least one virtual network adapter, wherein each virtual network adapter is individually associated with a third routing table *(each of the line cards 515A-515C include one or more forwarding tables ... a virtual router uses more than one VR forwarding table, VR interior gateway routing table, and/or VR exterior gateway routing table)* **(Shen, Fig. 5 and paragraph [0051])**.

8.   As to claim 5, **Shen-Killian** teaches the method of claim 4, wherein the third routing table includes next hop and interface entries pointing to at least one of the following: another routing table or a real network adapter, and wherein the step of relaying uses the at least one virtual network adapter and its associated third routing table *(if the destination of the packet is ED3, then the forwarding module 207 forwards the packet 201 to the virtual router 205B and the virtual router 205B will process the packet 201 in accordance with its forwarding/routing information/table)* **(Shen, paragraphs [0028-0029])**.

9.   Claims 7-12 and 14-15 recite corresponding network adapter, client terminal, router, system and computer program product claims that contain similar limitations as claims 1 and 3-5; therefore, they are rejected under the same rationale.

10.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shen-Killian, in view of Zhou (US 2002/0138578).

11.   As to claim 6, **Shen-Killian** teaches the method of claim 1, but does not explicitly teach the step of selecting a routing table is triggered by the source.

In the same field of endeavor, **Zhou** teaches when a client application program wants to communicate with a server application, the client application creates a socket on the client and may determine a client computer software port that is to be mapped to the client application. The client application then specifies that the created socket has a destination IP address corresponding to the destination computer and a destination software port that corresponds to the port mapped to the server application program *(i.e., triggered by the source to select the port associated with the destination address)*, and uses the socket to make a connection request to the server application **(Zhou, page 1, paragraph [0005])**.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the features of selecting a routing table which defines the port associated with destination address, as disclosed by **Zhou**, into the teachings of **Shen-Killian**, since both references are directed to relaying network

traffic using routing tables. One would be motivated to do so to allow the source, i.e., the client application, to create a socket which defines a destination address corresponding to the destination computer and a destination port that corresponds to the port mapped to the server application program, and use the socket to make a connection request to the server application **(Zhou, page 1, paragraph [0005])**.

Response to Arguments

12.   In the Remarks, Applicant argued in substance that

   (A)   *"The Applicant submits that Shen and Killian do not provide a motivation to combine the elements of each in order to obviate the elements of new amended claims 1, 9, 10, 11 and 14",* as recited in page 11 of the Remarks.

   As to point **(A)**, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that <u>obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art</u>.   See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Examiner respectfully submits that **Shen** explicitly teaches all the limitations of claim 1, except wherein the first and second routing tables define said first and second destinations as default destinations which are used for traffic relay in any default situation.

In the same field of endeavor, **Killian** teaches all routing tables should include a default entry, wherein a default routing table entry is one to be associated with any messages whose destination addresses do not match the destination address or address range of any of the other routing table entries **(Killian, page 7, lines 12-35)**.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the features of defining first and second destinations as default destinations which are used for traffic relay in any default situation for the first and second routing tables, as disclosed by **Killian**, into the teachings of **Shen**, since both references are directed to relaying network traffic using routing tables.

One skill in the art would be motivated to include a default entry in a routing table to allow messages, whose destination addresses do not correspond to any specific address or address range contained in the destination column of the routing table, to be relayed to the default destination, i.e., the next hop, through which the message should be routed to get to its destination **(Killian, page 7, lines 25-43)**.

13.   Applicant's arguments as well as request for reconsideration filed on 07/07/2008 have been fully considered but they are moot in view of the new ground(s) of rejection.

14.   A shortened statutory period for reply to this action is set to expire THREE (3) months from the mailing date of this communication. See 37 CFR 1.134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quang N. Nguyen/
Primary Examiner, Art Unit 2141

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination
	10/697,121	VAN ACKERE ET AL.
	Examiner	**Art Unit**	
	Quang N. Nguyen	2141	